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(71) Applicant (for all designated States except US): **CARL ZEISS SMT AG** [DE/DE]; Carl-Zeiss-Str. 22, 73447 Oberkochen (DE).

(72) Inventors; and

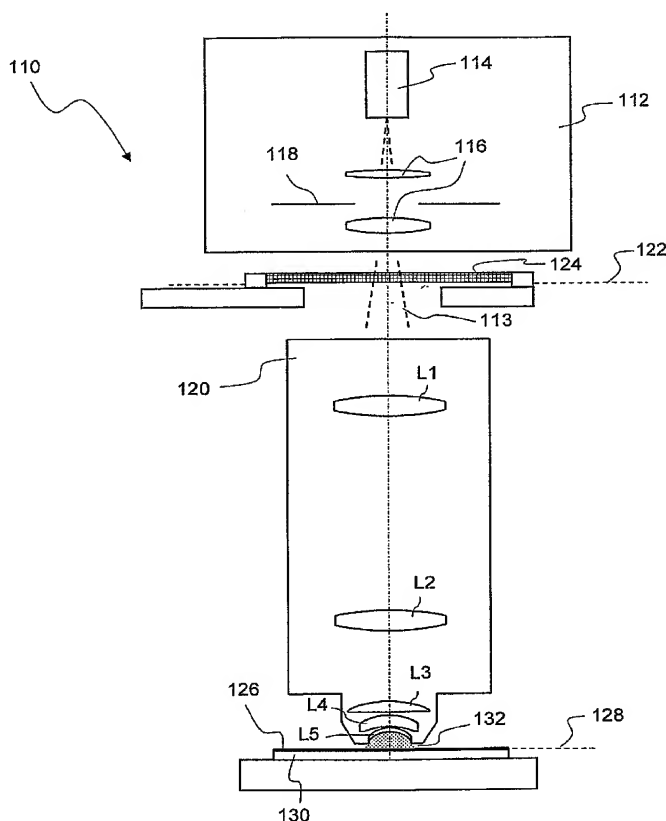
(75) Inventors/Applicants (for US only): **KNEER, Bernhard** [DE/DE]; Mühlenweg 9, 89605 Altheim (DE). **WABRA, Norbert** [DE/DE]; Am Ring 20, 97440 Werneck (DE). **GRUNER, Toralf** [DE/DE]; Opalstr. 22, 73433 Aalen-Hofen (DE). **EPPLÉ, Alexander** [DE/DE]; Langertstrasse 38, 73431 Aalen (DE). **BEDER, Susanne** [DE/DE]; Brandenburger Strasse 59, 73431 Aalen (DE). **SINGER, Wolfgang** [DE/DE]; Egerlandstrasse 45, 73431 Aalen (DE).

(74) Agents: **SCHWANHÄUSSER, Gernot** et al.; Ostertag & Partner, Eibenweg 10, 70597 Stuttgart (DE).

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(54) Title: PROJECTION OBJECTIVE FOR A MICROLITHOGRAPHIC PROJECTION EXPOSURE APPARATUS



(57) Abstract: A projection objective of a microlithographic projection exposure apparatus (110) is designed for immersion operation in which an immersion liquid (134) adjoins a photosensitive layer (126). The refractive index of the immersion liquid is greater than the refractive index of a medium (L5; 142; L205; LL7; LL8; LL9). that adjoins the immersion liquid on the object side of the projection objective (120; 120'; 120"). The projection objective is designed such that the immersion liquid (134) is convexly curved towards the object plane (122) during immersion operation.

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